

1N4933S thru 1N4937S

Fast Switching Rectifiers

Reverse Voltage 50 to 600V Forward Current 1.0A

Feature & Dimensions

- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * High temperature metallurgically bonded construction
- * Diffused junction
- * Capable of meeting environmental standards of MIL-S-19500
- * 1.0 A operation at TC=75°C with no thermal runaway
- * For use in high frequency rectifier circuits
- * Fast switching for high efficiency
- * Typical IR less than 1.0μA
- * High temperature soldering guaranteed:
260°C/10 seconds
- * 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

Case: JEDEC A-405, molded plastic body

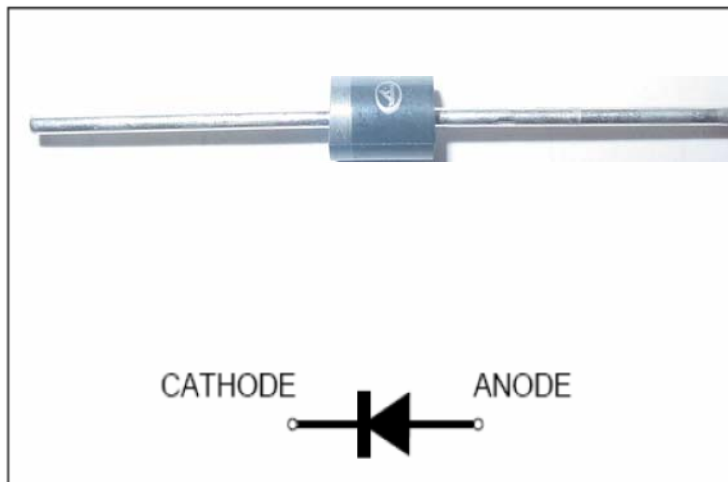
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position Any

Weight 0.012 oz., 0.284 g

Handling precaution None



We declare that the material of product compliance with ROHS requirements

1. Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N 4933	1N 4934	1N 4935	1N 4936	1N 4937	Unit
Marking spec		1N 4933	1N 4934	1N 4935	1N 4936	1N 4937	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _c = 75°C	IF(AV)	1.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30					A
Maximum full load reverse current, full cycle average, 0.375" (9.5mm) lead lengths at T _a = 55°C	IR(AV)	100					μA
Typical thermal resistance (Note 2)	RθJA	60					°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-50 to +150					°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N 4933	1N 4934	1N 4935	1N 4936	1N 4937	Unit
Maximum instantaneous forward voltage at 1.0A	V _F	1.2					V
Maximum DC reverse current T _A = 25°C at rated DC blocking voltage T _j = 125°C	IR	5.0 100					μA
Typical reverse recovery time (Note 1)	trr	150					ns
Typical junction capacitance at 4.0V, 1MHz	C _J	15					PF

NOTES:

1. IF = 0.5A, IR = 1.0A, IRR = 0.25A
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

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2. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

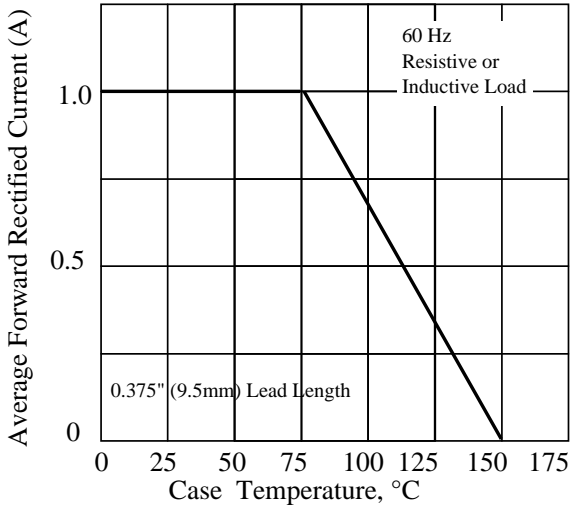


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

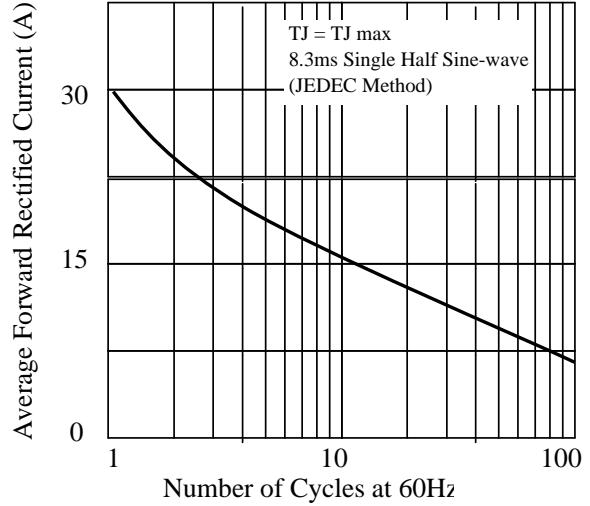


Fig 3. - Typical Instantaneous Forward Characteristics

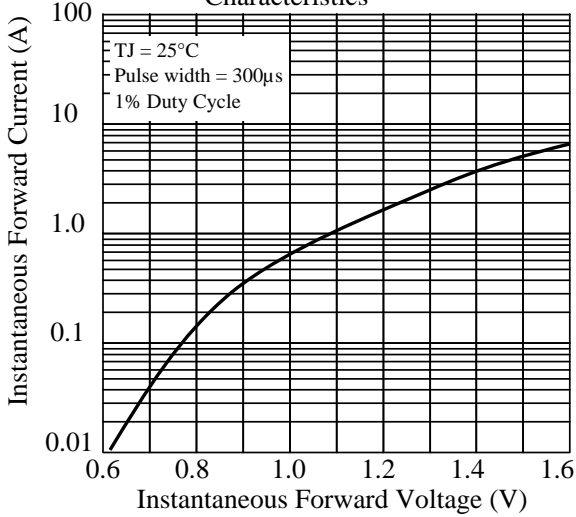


Fig 4. - Typical Reverse Characteristics

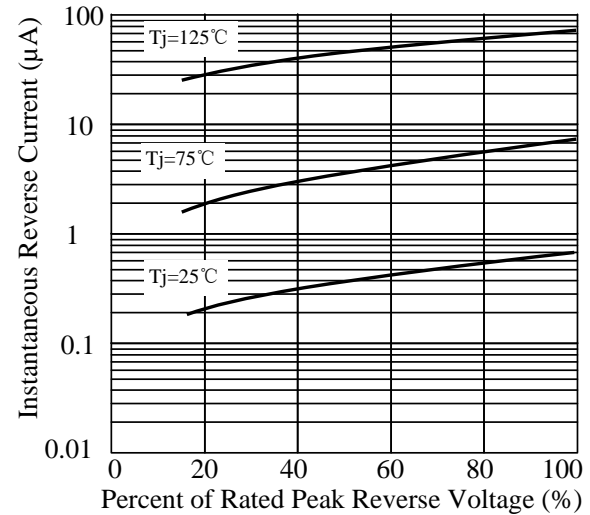


Fig 5. - typical transient thermal impedance

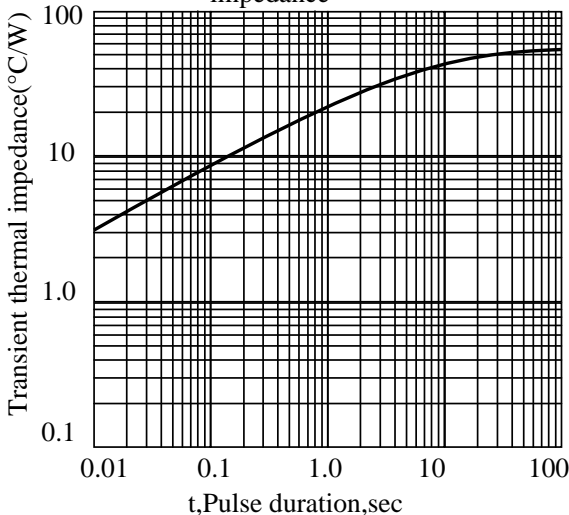
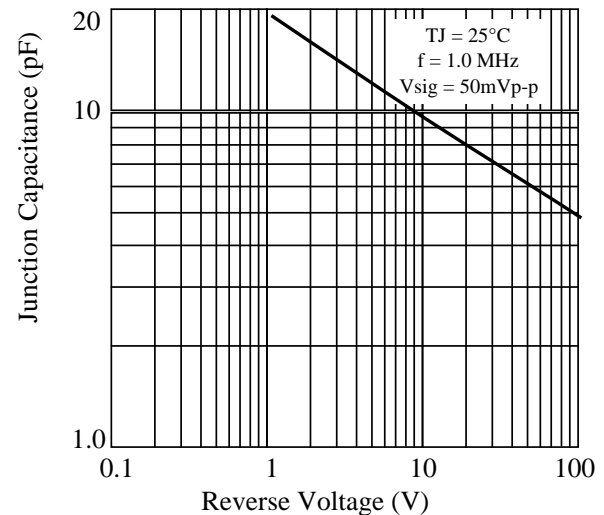
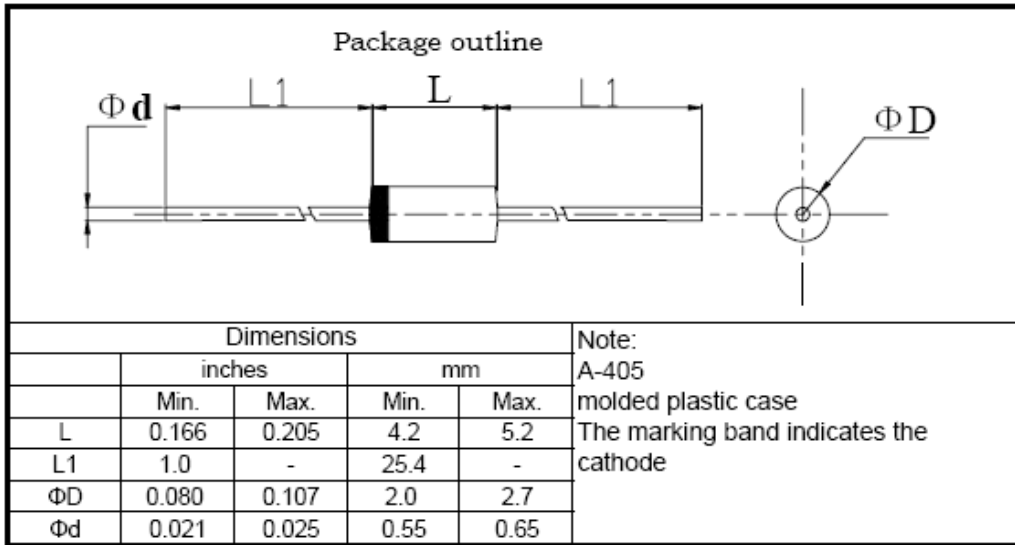


Fig 6. - Typical Junction Capacitance



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3. dimension:





标题:

塑封生产线轴向产品包装规范

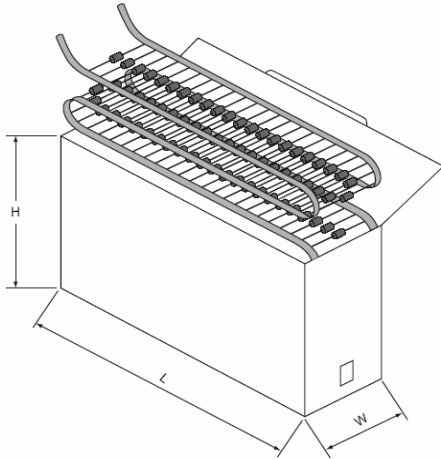
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5.1.2 弹带盒装

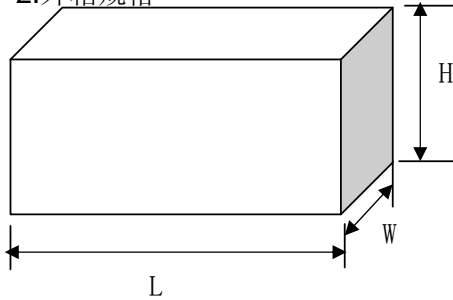
1. 弹带盒规格



单位: mm

	L	W	H
52编带尺寸	262±2	76±2	90±2
42编带尺寸	262±2	64±2	90±2
26编带尺寸	250±3	45±3	95±3

2. 外箱规格



单位: mm

	L	W	H
52外箱尺寸	405±2	270±2	195±2
42外箱尺寸	412±2	282±2	295±2
26外箱尺寸	425±3	280±3	330±3

3. 按以上包装方式, 编带数量和外包装箱产品数量:

	塑封外型			
	A-405 & DO-41 & R-1	R-3	DO-15	DO-201AD
每根编带数量	3K	1.8K	2K(T52) 1.8K(T26)	0.8K
T52外箱数量	30K	18K	20K	8K
T42外箱数量	54K	32.4K	36K	
T26外箱数量	84K	50.4K	50.4K	



标题:

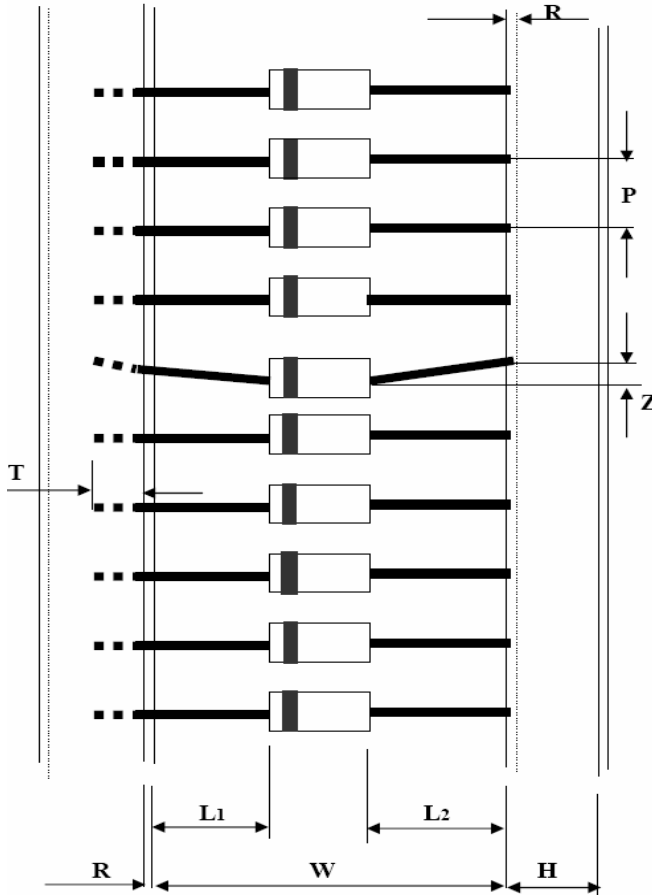
塑封生产线轴向产品包装规范

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5.1.4 编带规格



Unit:mm

尺寸代号	编带尺寸					
	26/tape	35/tape	40/tape	42/tape	52/tape	52/tape#
W	26 0.0/+1.6	35 -1.0/+0.5	40 -1.0/+0.5	42 -1.0/+1.0	52 -1.0/+2.0	52 -1.0/+2.0
P	5±0.5	5±0.5	5±0.5	5±0.5	5±0.5	10±0.5
L1-L2	<1.0	<1.0	<1.0	<1.0	<1.2	<1.2
H	6±1.0	6±1.0	6±1.0	6±1.0	6±1.0	6±1.0
Z	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
R	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
T	>3.5	>3.5	>3.5	>3.5	>3.5	>3.5

注: 52编带# 为DO-201AD编带规格

1. 红白编带厚度为0.05mm; 两种胶带各自之间无明显色差; 编带要求均为胶带。
2. 两端引带20~40cm.
3. 红色编带一端为二极管“负极”; 白色编带一端为二极管“正极”。
4. 无卤(无卤产品才贴)

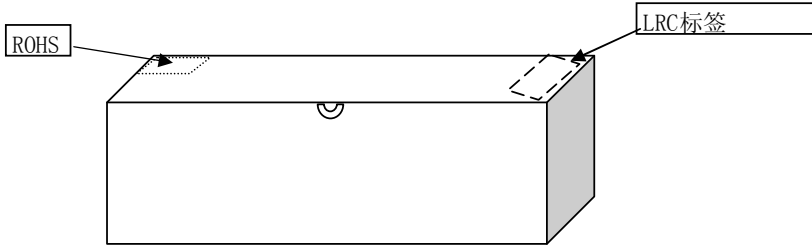


标题: **塑封生产线轴向产品包装规范**

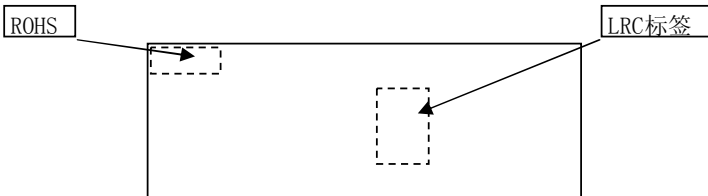
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5.2、轴向产品通用包装规范

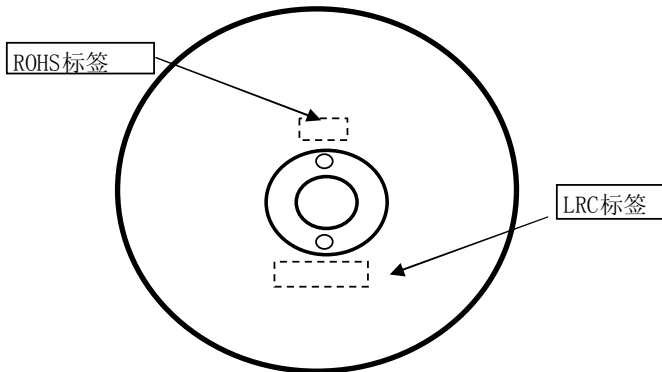
5.2.1.1 弹带内盒要求



5.2.1.2 盒装要求



5.2.1.3 卷装要求



5.2.2 标签要求

5.2.2.1 LRC 标签

型号 (1P) LPN: 1N4007
 批次号 (1T) LOT: L1210T042
 周期码 (9D) DTE: 1242
 数量 (Q) QTY: 3000

二维码

产地信息
CS:LESHAN
Pb FREE PLTG
assembled in
CHINA

制造商信息
LRC

The diagram shows a barcode with four data fields: Model (1P) LPN: 1N4007, Lot (1T) LOT: L1210T042, Date (9D) DTE: 1242, and Quantity (Q) QTY: 3000. To the right is a circular LRC label containing a QR code and the text '产地信息 CS:LESHAN Pb FREE PLTG assembled in CHINA'. Below the label is the text '制造商信息 LRC'.

5.2.2.1.2 环保标签



标题:

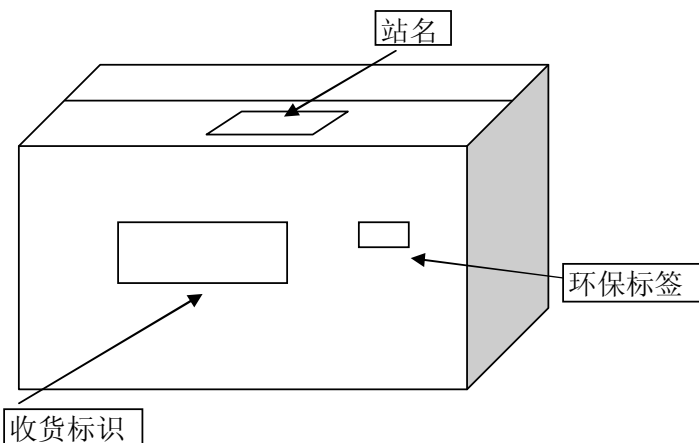
塑封生产线轴向产品包装规范

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5.2.3外箱要求



5.2.3.1收货标识

客户	
型号	
数量	
CPN	

此栏根据客户需要，若无CPN则无

5.2.3.2环保标签



5.2.3.3站名

例

XXXX

5.3.1产品出厂检验报告

每批出货时，需要附上出厂检验报告

5.3.2尾箱

同一编码每批次只允许出现一个尾数箱，对于尾数物料，须用缓冲材料对空余部分填充好，保证物料在受到一定的外作用力下不发生明显移动，且物料间无碰撞。

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4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	周杰	2010-3-23
2	增加包装规范	周杰	2014-6-16